# H660GM

Compact WLAN GPON ONT (Optical Network Termination)
for the connection to the V-Series GPON OLTs



H660GM

- Supports the ITU-T G.984 standard
- Uplink interface with 2.5 Gbs downstream and 1.25 Gbs upstream
- 4 GbE LAN interfaces
- High-Speed WLAN according to IEEE802.11b/g/n/ac
- Supports IGMP snooping for IPTV applications
- Management via OMCI (ONT management control interface)

The H660GM is a compact ONT that provides highly reliable residential and business services in PON networks. The ONT is ideal for all applications that require POTS and a multitude of Ethernet interfaces for high-speed Internet.

Thanks to the used leading edge GPON technology, bandwidth-intensive multimedia services such as real time video, audio and gaming can be provided much easier and faster than ever before.

## Interfaces

H660GM offers a multitude of interfaces to provide the required services:

- 1x GPON with data rates of 1.25 Gbps in upstream direction and 2.5 Gbps in downstream direction
- 4x Gigabit Ethernet ports (10/100/1000Base-T)
- 1x analogue telephony (FXS)
- Wireless LAN

## Services

H660GM supports high-speed Internet and telephony services.

The ONT uses the Session Initiation Protocol (SIP) to terminate VoIP calls. So the in-home wiring must not be changed and existing analogue telephones can continue to be used.

The ONT functionality contains a wire-speed L2 switch as well as a L3 routing gateway with port forwarding, NAT and NAPT address translation and PPPoE client support for high-speed Internet service.

The ONT is designed for installation in houses. It can be used as a desktop unit or simply mounted onto a wall.

### ■ PON benefits

PON technology offers cost-efficient FTTx services thanks to the point-to-multipoint concept.

The use of passive optical splitters in opposite to active switch systems makes passive optical networks a cost-efficient solution.

### ■ Management

The configuration of the ONTs and the provided services is realised completely via the OMCI (ONT Management Control Interface).

## Technical data

| General | |
|---|---|
| Network function | GPON ONT |
| Full duplex modus | WAN, LAN |
| **GPON interface** | |
| Standards supported | Compatible with ITU-T G.984x, Forward Error Correction (FEC) |
| | SC/APC type, Advanced Encryption Standard (AES) |
| | Multiple T-CONTs/GEM ports per device, Single/multiple T-CONT(s) mode |
| | Flexible mapping between GEM port and T-CONT, Dying gasp |
| | Priority queues and scheduling in upstream |
| | Activation with with automatic detection of serial number and passwort |
| Optical connector | SC/APC |
| **LAN interface** | |
| Standard supported | 4x Gigabit Ethernet (10/100/1000Base-T − RJ45) |
| **Multicast** | |
| Multicast function | IGMP snooping, IGMP proxy |
| **Layer-2 switch functionality** | |
| Standards supported | Untagged port configuration |
| | IEEE802.1D and IEEE802.1Q bridging |
| | Standard Ethernet bridging |
| | MAC address learning with auto aging and filtering |
| **QoS (Quality of service)** | |
| Standards supported | Hardware based with internal IEEE 802.1p (CoS), Strict Priority (SP) |
| | 802.1Q (VLAN tag) QoS mapping, ToS/CoS |
| Number of queues | 8 |
| **WLAN interface** | |
| Standards supported | IEEE802.11b/g/n/ac compliant, 4 antennas,  Bandwidth: 2.4GHz and 5GHz |
| | Max. data rate: 300 Mbps in 802.11n, 867 Mbps in 802.11ac, 2x 2 MIMO |
| | Security: WEP with 64/128 bit, WPA-PSK (TKIP) & WPA2-PSK (AES) |
| | Wi-Fi protected setup (WPS), multiple SSIDs |
| **VoIP interface** | |
| Standards supported | SIP (RFC3261/3262/3264), 5-REN per POTS, T.38 FAX mode |
| | Multiple codecs: G.711, G.723.1, G729, echo cancellation |
| **Management** | |
| Standard supported | According to ITU-T 984.4 with OMCI interface |
| | IEEE802.3x flow control |
| **Mechanics** | |
| Dimensions (W x H x D) | 160 mm x 210 mm x 130 mm |
| **Power supply** | |
| Input voltage | 12 V DC with external power plug 100-240 V AC (50/60 Hz) |
| **Operation environment** | |
| Operation temperature | -5 °C to 50 °C |
| Humidity | 20 % to 90 % (non-condensing) |